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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,249	01/16/2002	Horst Greiner	DE 010022	9227

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
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BRIARCLIFF MANOR, NY 10510

EXAMINER

LEE, Y MY QUACH

ART UNIT	PAPER NUMBER
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2875

DATE MAILED: 07/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/050,249

Applicant(s)

GREINER, HORST

Examiner

Y Quach Lee

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,7,8 and 12 is/are rejected.
- 7) ☒ Claim(s) 3, 6 and 9 to 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/16/02 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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***DETAILED ACTION***

***Response to Arguments***

1. Applicant's arguments as set forth on pages 7 and 8 of May 9, 2003 have been fully considered but they are not persuasive. Applicant argues that the thin sheet metal disk of Dupree does not reflect and therefore cannot read on the reflecting layer of claim 1. It should be noted that the reflectivity of the metal disk is taught in Dupree because metal is any of various opaque, fusible, ductile and typically lustrous materials that are good conductors of electricity and heat ... (Webster's Collegiate Dictionary, "a Merriam-Webster"). Therefore, the metal not only constitutes or having the nature of reflecting light but also conducts heat. The metal disk of Dupree is not established by probabilities or possibilities but is because of it's lustrous substance and as such reads on the reflecting layer as claimed. Accordingly, rejection of claims 1, 2, 4, 5 and 12 under Dupree maintains and follows.

***Claim Objections***

2. Claims 5 and 7 are objected to because of the following informalities: In claims 5 and 7, there is no clear antecedent basis for "the lower side of the optical waveguide plate". It should be changed to --a lower side of the optical waveguide plate--. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. Claims 7 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 7, it is not clear how can the second reflecting layer of the cavity, as claimed in claim 3, extend over the side faces and the lower side of the optical waveguide plate? In view of drawing figure 2 and the specification, the reflecting layer (205) is on the lower side of the cavity, and the reflecting layer (121) extends over the side faces and the lower side of the optical waveguide plate. It is suggested that the limitation "the second reflecting layer", on lines 2 to 3 of claim 7, should be changed to --a third reflecting layer--.

In claim 8, line 2, it is suggested that the term "second" should be changed to --third--.

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***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 4 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Dupree.

Dupree shows a lighting device comprising an optical waveguide plate (10) having a light emission surface (figure 2), a plurality of different colored light sources (25, 30, column 4, line 4 and column 6, lines 27 to 28) accommodated in a plurality of substantially cylindrical cavities (R) provided in a lower side of the plate opposite the light emission surface, each of the cavities having side walls and an upper side coated with a sheet of metal layer (34), which is considered to be and reads on a first reflecting layer, while the light coupling with the plate through the side walls, the upper side of the cavity facing the light emission surface and extending substantially parallel to the light emission surface, and the side wall extending substantially perpendicularly to the light emission surface.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dupree.

Dupree discloses the invention substantially as claimed with the exception of having the lighting device in the liquid crystal display.

It should be noted that where the lighting device is incorporating is considered to be a field which a claimed apparatus is intended to be employed, it does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. No patentable weight is given thereto.

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8. Claims 7 and 8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

9. Claims 3, 6 and 9 to 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


10. Claim 3 contains allowable subject matter because the prior art does not teach the cavities coated with a second reflecting layer at their lower sides opposite to the upper sides in combination with the features as claimed in claim 1. Claim 6 contains allowable subject matter because the prior art does not teach the light sources comprised of a plurality of red, green and blue light emitting diodes which are distributed such that no light sources of the same color lie in mutually adjoining cavities in combination with the features as claimed in claim 1. Claims 7 and 8 contain allowable subject matter because the prior art does not teach a third reflecting layer extending over the side faces and a lower side of the optical waveguide plate in combination with the features as claimed in claims 1 and 3. Claims 9 to 11 contain allowable subject matter because the prior art does not teach the first reflecting layer prolonged by a portion continuing horizontally into the waveguide plate in combination with the features as claimed in claim 1, the first reflecting layer prolonged by a portion continuing along the side walls of the cavity in combination with the features as claimed in claim 1, and the edges of the cavities lying opposite the upper side surrounded by a third reflecting layer in combination with the features as claimed in claim 1.

### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Y Quach Lee whose telephone number is 703-308-1939. The examiner can normally be reached on Tuesday and Thursday from 8:30 am to 4:30 pm.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Y. Q.  
July 22, 2003

  
Y Quach Lee  
Patent Examiner  
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